

## U19 SERIES TIED-DIAPHRAGM UHP REGULATOR

GENTEC® U19 series single stage tied-diaphragm UHP regulator is designed for the semiconductor industry and manufactured in accordance with SEMI requirements. The regulators are assembled, tested and packaged in a class 100 clean room.



» U19SLBK-DHP-VSM4-E



» U19SLAK-DGW-VSF4-E

### Features

- 316L or 316L VAR stainless steel body
- Metal to metal diaphragm to body seal
- Easy front panel and rear bracket mounting
- Gauge ports are standard with 1/4" face seal male
- Fully internal electropolished
- Cleaned, assembled, and packaged for high-purity semi-conductor applications

### Materials

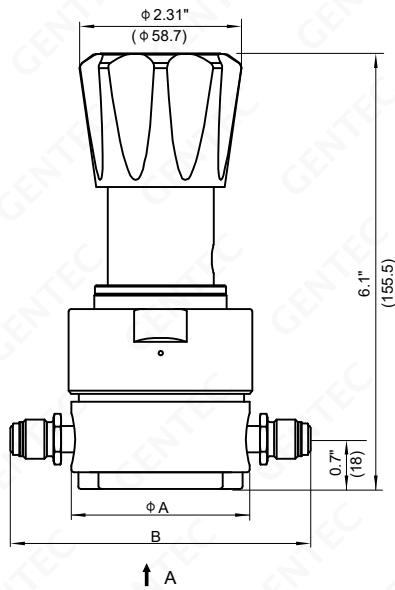
- Body: 316L, 316L VAR
- Seat: PCTFE\*, Vespel®
- Diaphragm: HC22

### Specifications

- Max. Inlet Pressure: 500, 3000, 4500 psi
- Max. Outlet Pressure: 15, 25, 50, 100, 150, 250 psi
- Temperature: -40°F ~ 165°F (-40°C ~ 74°C)
- U19 Series Cv: 0.13
- U19A Series Cv: 0.16
- Inboard leakage:  $1 \times 10^{-9}$  atm cc/sec He
- Across seat leakage:  $4 \times 10^{-8}$  atm cc/sec He
- Proof pressure: 150% of maximum rated pressure
- Burst pressure: 400% of maximum rated pressure
- Surface Finish: Ra 10  $\mu$ m
- Internal Volume: 13.5 cc

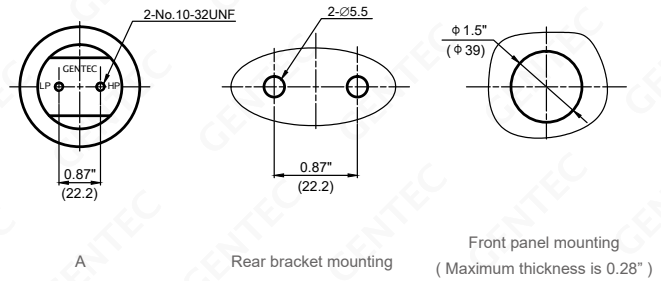
\*: Standard Material

### Dimensions

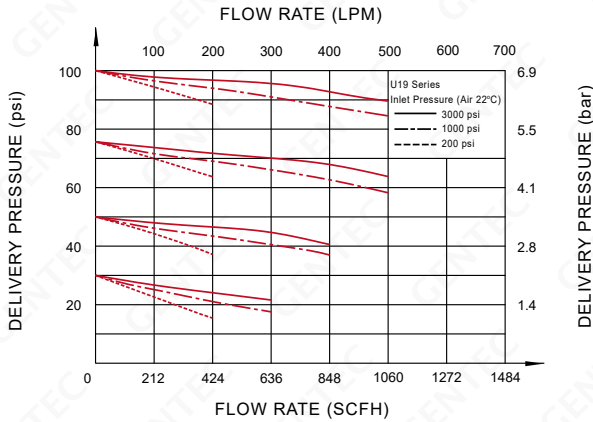


Dimension: in.(mm)

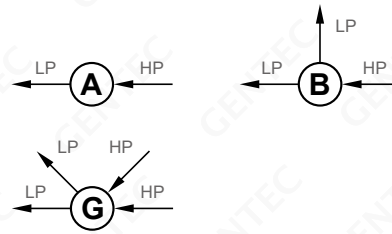
Connection Type		Dimension	
		A	B
VSF4	1/4" Swivel Female FSR	2.6" (65)	4.3" (109)
VSM4	1/4" Swivel Male FSR		4.3" (109)
VSF8	1/2" Swivel Female FSR		5.2" (133)
VSM8	1/2" Swivel Male FSR		5.2" (133)



### Flow Data



### Body Ports



	Material Configuration		
	U19SL	U19SLV	U19SLV***-H
Body	316L	316L VAR	316L VAR
Diaphragm	HC-22	HC-22	HC-22
Stem	316L	316L	HC-22
Nozzle	316L	316L	HC-22
Seat	PCTFE	PCTFE	PCTFE
Surface Finish	10 µin	10 µin	10 µin

### Ordering Information

EX: U19	SL	B	K	- D	H	P	- VSF4	- E	- H	- P
Series Number	Body Material	Body Ports	Seat Material	Inlet Pressure	Outlet Pressure	Gauge Configuration	Inlet / Outlet Connection	Surface Finish	Corrosion Resistance	Options
U19	SL: 316L	A	K: PCTFE	C: 4500 psi	G: 0 ~ 250 psi	W: Without Gauge	VSF4, VSM4,	E: Ra 10 µin	None: Standard	None: Rear
U19A	SLV: 316L VAR	B	V: Vespel®	D: 3000 psi	H: 0 ~ 150 psi	P: psi / bar Gauge	VSF8, VSM8		H: HC22 Stem	Bracket
		G		F: 500 psi	I: 0 ~ 100 psi	K: psi / kPa Gauge	.....		HC22 Nozzle	Mounting
					J: 0 ~ 50 psi					P: Panel
					L: 0 ~ 25 psi					Mounting
					M: 0 ~ 15 psi					

